

REMARKS

Claims 1-69 are pending in this application.

Claims 16-60 have been withdrawn from consideration as being drawn to a non-elected invention. Claims 61-62 and 64-69 have been cancelled without prejudice or disclaimer. Therefore, claims 1-15 and 63 remain pending in the present application.

Claim 1 has been amended to recite a topical pharmaceutical composition, comprising a topically acceptable carrier, and a therapeutically effective amount of at least one cyclic psychotropic agent for treating a benign hyperproliferative skin disorder associated with excessive proliferation of skin cells, wherein the at least one cyclic psychotropic agent being other than doxepine and tomoxetine, is selected from the group consisting of an antidepressant agent and an antipsychotic agent. Support for amended claim 1 appears throughout the specification, Examples, and claims as originally filed. Please see pages 5-6 of the present specification.

Claim 7 has been amended to correct a minor error:

Claims 9 and 10 have been amended to recite that the phenothiazine is a phenothiazine "compound." Likewise, claims 11 and 12 have been amended to recite that the thioxanthene is a thioxanthene "compound." Support for amended claims 9-12 appears throughout the specification, Examples, and claims as originally filed. Please see page 15, line 23 of the present specification.

Claim 63 has been amended to incorporate the elements of cancelled claim 62. Additionally, claim 63 has been amended to delete the phrase "and skin cancer without prejudice or disclaimer to the deleted subject matter. Further, claim 63 has been amended to depend from independent claim 1. Support for amended claims 63 appears throughout the specification, Examples, and claims as originally filed. Please see page 10, lines 4-13 and pages 5-6 of the present specification.

No new matter has been added.

In view of the following, further and favorable consideration is respectfully requested.

I. At page 3 of the Official Action, claims 4 and 5 have been rejected under 35 USC § 112, second paragraph.

The Examiner asserts that the term "derivative" is not clear. The Examiner also asserts that claim 10 lacks antecedent basis in claim 9.

Accordingly, claims 4 and 5 have been amended to replace the term "derivative" with the term "compound." Claims 9 and 10 have been amended to recite that the phenothiazine is a phenothiazine "compound."

In view of the foregoing, it is submitted that claims 4, 5, 9, and 10, are clear and definite within the meaning of 35 USC § 112, second paragraph. Accordingly, the Examiner is respectfully requested to withdraw this rejection.

II. At page 4 of the Official Action, claims 1-3, 7, 8, 14, 15, and 61-69, have been rejected under 35 USC § 112, first paragraph as lacking enablement.

The Examiner asserts that the claims are not enabled for any cyclic psychotropic agent, any antidepressant or antipsychotic, or any serotonin and/or noradrenaline reuptake inhibitor.

In view of the following, this rejection is respectfully traversed.

In order to make an enablement rejection, the Examiner has the initial burden to establish a *reasonable* basis to question the enablement provided for the claimed invention. *In re Wright*, 27 USPQ2d 1510 (Fed. Cir. 1993).

The test under 35 U.S.C. § 112, first paragraph, for determining compliance with the enablement requirement is whether one skilled in the art could make or use the claimed invention from the disclosures in the patent coupled with information known in the art without undue experimentation. *United States v. Teletronics, Inc.*, 8 USPQ2d 1217 (Fed. Cir. 1988).

Applicant asserts that the specification as originally filed enables the full scope of the claims as amended. Specifically, Claim 1 has been amended to recite a topical pharmaceutical composition, comprising a topically acceptable carrier, and a therapeutically effective amount of at least one cyclic psychotropic agent for treating a benign hyperproliferative skin disorder associated with excessive proliferation of skin cells, wherein the at least one cyclic psychotropic agent being other than doxepine and tomoxetine, is selected from the group consisting of an antidepressant agent and an antipsychotic agent. Claims 2-3, 7,

8, 14, 15, and 63 all depend, either directly or indirectly, from claim 1. Claims 61-62 and 64-69 have been cancelled without prejudice or disclaimer.

The enablement provision of the Patent Act requires that the patentee provide a written description of the invention "in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same." 35 U.S.C. § 112, ¶ 1 (2000). The purpose of this requirement is to ensure that "the public knowledge is enriched by the patent specification to a degree at least commensurate with the scope of the claims." *Nat'l Recovery Techs., Inc. v. Magnetic Separation Sys., Inc.*, 166 F.3d 1190, 1195-96 (Fed. Cir. 1999); see also Donald S. Chisum, 3 *Chisum on Patents* § 7.01 (2002).

Accordingly, the specification must provide sufficient teaching such that one skilled in the art could make and use the full scope of the invention without undue experimentation. *CFMT, Inc. v. Yieldup Int'l Corp.*, 349 F.3d 1333, 1338 (Fed. Cir. 2003); *Genentech, Inc. v. Novo Nordisk A/S*, 108 F.3d 1361, 1365 (Fed. Cir. 1997); *In re Wands*, 858 F.2d 731, 736-37 (Fed. Cir. 1988). "The key word is 'undue,' not experimentation." *Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988). Routine experimentation does not constitute undue experimentation. See *Johns Hopkins University v. Cellpro, Inc.*, 152 F.3d 1342 (Fed. Cir. 1998). That is, the specification need only teach those aspects of the invention that one skilled in the art could not figure out without undue experimentation. See, e.g., *Nat'l Recovery Techs.*, 166 F.3d at 1196 ("The scope of enablement . . . is that which is disclosed in the specification plus the scope of what would be known to

one of ordinary skill in the art without undue experimentation."); *Wands*, 858 F.2d at 736-37 ("Enablement is not precluded by the necessity for some experimentation such as routine screening."). "Nothing more than objective enablement is required, and therefore it is irrelevant whether this teaching is provided through broad terminology or illustrative examples." See *In re Wright*, 999 F.2d 1557 (Fed. Cir. 1993).

Although the ultimate determination of whether one skilled in the art could make and use the claimed invention without undue experimentation is a legal one, it is based on underlying findings of fact. *CFMT*, 349 F.3d at 1337. Furthermore, "[w]hether undue experimentation is needed is not a single, simple factual determination, but rather is a conclusion reached by weighing many factual considerations." *Wands*, 858 F.2d at 737.

Some of these considerations, commonly referred to as "the *Wands* factors," include "(1) the quantity of experimentation necessary, (2) the amount of direction or guidance presented, (3) the presence or absence of working examples, (4) the nature of the invention, (5) the state of the prior art, (6) the relative skill of those in the art, (7) the predictability or unpredictability of the art, and (8) the breadth of the claims." *Id.*; see also *Amgen, Inc. v. Chugai Pharm. Co.*, 927 F.2d 1200, 1213 (Fed. Cir. 1991) (stating that the *Wands* factors "are illustrative, not mandatory" and that what is relevant to an enablement determination depends upon the facts of the particular case).

In the present case, Applicant asserts that the specification, figures, and examples, provide ample guidance to the skilled artisan in view of the state of the art at the time the application was filed, to make and use the claimed invention without undue experimentation.

Asserting lack of enablement, the Examiner states that:

One of ordinary skill in the art, in order to practice the claimed invention with the full range of cyclic psychotropic agents beyond the meager number disclosed in the specification would be required to test potential compounds *in vivo* to determine whether a particular compound is useful as a cyclic psychotropic agent, as there exists no definitive *in vitro* test for psychotropic activity. See page 7 of the outstanding Official Action.

However, the Examiner is kindly reminded that the court in *In re Wright* held that nothing more than objective enablement is required, and therefore it is irrelevant whether this teaching is provided through broad terminology or illustrative examples.

Additionally, the Examiner further asserts that:

The Chemical Abstracts Registry contains entries for approximately 26 million compounds, all of which are potentially included in the claimed invention if they happen to have psychotropic activity and to be cyclic according to p. 14, lines 1-6 of the instant specification. *Id.*

Applicants submit that as amended claim 1 now contains the element "wherein the at least one cyclic psychotropic agent being other than doxepine and tomoxetine, is **selected from the group consisting of an antidepressant agent and an antipsychotic agent**. Therefore, as recognized by a person of ordinary skill in the art, the Examiner's assertion that approximately 26 million

compounds—the entirety of The 2006 Chemical Abstracts Catalogue—could be encompassed by the presently claimed subject matter is far overreaching.

In fact, at pages 14-15 of the present specification, antidepressants, as recited in claim 1, are described both in terms of “Mode of Action” and “General Chemical Formula.” Additionally, with regard to the antipsychotic agents recited in claim 1, page 15 of the present specification expressly discloses that “[t]he agent may also be a tricyclic anti-psychotic drug or atypical antipsychotic drug.” See the present specification at page 15, lines 20-21. The specification goes on to give non-exhaustive lists of both examples of tricyclic antipsychotic drugs as well as atypical antipsychotic drugs.

Reading the claims in view of the specification, a skilled artisan would be able to easily ascertain the scope of the presently claimed subject matter. Additionally, as the antidepressant and antipsychotic agents disclosed are well known to those skilled in the art, there would be no need for undue experimentation. Further, as admitted by the Examiner, “[t]opical administration of psychotropic-containing pharmaceutical compositions is demonstrated in several patients on pp. 24-32 of the instant specification.” See page 6 of the outstanding Official Action. Accordingly, Applicants submit that, in view of the *In Re Wands* factors the present specification enables the skilled artisan to make and use the full scope of the presently claimed subject matter. Therefore, Applicants submit that the claims are *prima facie* enabled by the specification.

In view of the foregoing, Applicants submit that the present specification enables the skilled artisan to make and use the full scope of the invention as claimed, within the meaning of 35 USC § 112, first paragraph. Thus, the Examiner is respectfully requested to withdraw this rejection.

III. At page 9 of the Official Action, claims 1-6, 14-15, and 61-69, have been rejected under 35 USC § 102(e), as being anticipated by Sawynok et al.

The Examiner asserts that Sawynok et al. (US Patent No. 6,211,171) discloses a composition comprising a specific tricyclic, second generation, or third generation antidepressant preferably formulated for local use as recited in instant claims 1-3 and 14-15. Additionally, the Examiner asserts that the antidepressant of Sawynok et al. is preferably one of the tricyclic antidepressants including clomipramine, imipramine, or amtriptyline. The Examiner further asserts that the antidepressant of Sawynok et al. could be a second or third generation antidepressant including trazodone, bupropion, or venlafaxane as recited by instant claims 4-6. Additionally, the Examiner asserts that the compositions of Sawynok et al. are inherently the same as the subject matter recited in present claims 61-69.

In view of the following, this rejection is respectfully traversed.

The test for anticipation is whether each and every element as set forth is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987); MPEP § 2131. The identical invention must be shown in as complete

detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989); MPEP §2131. The elements must also be arranged as required by the claim. *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990).

"For a prior art reference to anticipate a claim, the reference must disclose each and every element of the claim with sufficient clarity to prove its existence in the prior art...The reference must describe the applicant's claimed invention sufficiently to have placed a person of ordinary skill in the field of the invention in possession of it." See *In re Spada*, 911 F.2d 705 (Fed. Cir. 1990). Although the disclosure requirement presupposes the knowledge of one skilled in the art, that presumed knowledge does not grant a license to read into the prior art reference teachings that are not there. *Id.*

"Summary judgment of inherency anticipation was improper because of a material fact issue whether a prior art reference's process necessarily produced the claimed invention's features." See *Continental Can Company USA, Inc. v. Monsanto Co.*, 948 F.2d 1264 (Fed. Cir. 1991). "Consistent with the law of inherent anticipation, an inherent property must necessarily be present in the invention described by the count, and it must be so recognized by persons of ordinary skill in the art." *Id.* "The mere fact that a certain thing may result from a given set of circumstances is insufficient to prove anticipation." See *Electro Medical Systems, S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048 (Fed. Cir. 1994).

In *Glaxo Inc. v. Novopharm Ltd.*, 52 F.3d 1043 (Fed. Cir. 1995), the court held that the patent claim in suit was not inherently anticipated where the prior art

process produced alternate forms. More specifically, the Glaxo court held that Form 2 of ranitidine was not “inherently and necessarily” produced in Example 32 of Glaxo’s patent. The question is whether the missing element “is necessarily present in the thing described in the reference and that it would be so recognized.” See *Rosco, Inc. v. Mirror Lite Co.*, 304 F.3d 1373 (Fed. Cir. 2002). Regarding recognition, the question is whether one skilled in the art would read the prior art reference as inherently disclosing the invention. *Id.*

“Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” See *In re Oelrich*, 666 F.2d 578, 581 (CCPA 1981). “Occasional results are not inherent.” See *Mehl/Biophile International Corp. v. Milgram*, 192 F.3d 1362 (Fed. Cir. 1999). “A reference includes an inherent characteristic if that characteristic is the natural result flowing from the reference’s explicitly explicated limitations.” See *Continental Can Company USA, Inc., supra*.

Amended claim 1 is directed a topical pharmaceutical composition, comprising a topically acceptable carrier, and a therapeutically effective amount of at least one cyclic psychotropic agent for treating a benign hyperproliferative skin disorder associated with excessive proliferation of skin cells, wherein the at least one cyclic psychotropic agent being other than doxepine and tomoxetine, is selected from the group consisting of an antidepressant agent and an antipsychotic agent. Claims 2-3, 7, 8, 14, 15, and 63 all depend, either directly or

indirectly, from claim 1. Claims 61-62 and 64-69 have been cancelled without prejudice or disclaimer.

In contrast, Sawynok et al. is directed to tricyclic, second generation and third generation antidepressants, such as amitriptyline and desipramine, which have been shown to produce analgesic effects in a subject having a site of local discomfort. The analgesic effect of such antidepressants, when administered locally is equal to that achieved by systemic administration and lasts longer. The invention provides compositions containing tricyclic, second generation, and third generation antidepressants for local administration, such as those formulated for topical application, or for injection in slow release delivery vehicles, and methods for their use for producing local analgesia. See Sawynok et al., the Abstract.

Sawynok et al. does not expressly or inherently teach each and every element of present independent claim 1. Specifically, Sawynok et al. does not teach a composition comprising a therapeutically effective amount for treating a benign hyperproliferative skin disorder associated with excessive proliferation of skin cells, as recited in present claim 1. Rather, Sawynok et al. teaches an **analgesic** composition for local administration that produce an antonocieceptive action, especially against inflammation and neuropathic pain. See Sawynok et al. at col. 4, lines 20-23.

Applicants submit that Sawynok et al. does not teach or suggest a topical pharmaceutical composition, comprising a topically acceptable carrier, and a therapeutically effective amount of at least one cyclic psychotropic agent for **treating a benign hyperproliferative skin disorder associated with**

excessive proliferation of skin cells, wherein the at least one cyclic psychotropic agent being other than doxepine and tomoxetine, is selected from the group consisting of an antidepressant agent and an antipsychotic agent , as presently claimed.

Additionally, although Sawynok et al. mentions topical administration of the compounds recited therein, all of the Examples described in Sawynok et al. exemplify methods of administration to the nervous system via local injection. The local injection affects the nervous system and produces an antinociceptive action. Accordingly, although Sawynok et al. mentions local and topical, the effect achieved is not local. In contrast, the present invention utilizes a top-of-the-skin route of administration that produces a local effect.

In view of the foregoing, it is submitted that Sawynok et al. does not teach, either expressly or inherently, each and every element claimed in claims 1-6, 14-15, and 63, as required for anticipation under 35 USC § 102 (e). Accordingly, the Examiner is respectfully requested to withdraw this rejection.

III. At page 10 of the Official Action, claims 1-4, 7-15, and 61-69, have been rejected under 35 USC § 102(b), as being anticipated by Beltner.

The Examiner asserts that Beltner (EP 0 168 626) anticipates claims 1-4, 7-15 and 61-69 because the compositions disclosed in Beltner are antipsychotic and antidepressant drugs that comprise the same ingredients as those of the claimed invention, and therefore inherently possess activity against proliferative dermatological diseases.

In view of the following, this rejection is respectfully traversed.

The test for anticipation is discussed in detail above with regard to the previous rejection.

As discussed, amended claim 1 is directed to a topical pharmaceutical composition, comprising a topically acceptable carrier, and a therapeutically effective amount of at least one cyclic psychotropic agent for treating a benign hyperproliferative skin disorder associated with excessive proliferation of skin cells, wherein the at least one cyclic psychotropic agent being other than doxepine and tomoxetine, is selected from the group consisting of an antidepressant agent and an antipsychotic agent. Claims 2-4, 7-15, and 63 all depend, either directly or indirectly, from claim 1. Claims 61-62 and 64-69 have been cancelled without prejudice or disclaimer.

Beltner is directed to a specific composition for the manufacture of a medicament for the therapeutic **treatment of trauma to the skin**. In particular, burn, sunburn and frostbite are treated with the compounds that have the ability to interfere with the action of calcium clamodulin complex.

Beltner does not expressly or inherently teach each and every element of present independent claim 1. Specifically, Beltner does not teach a composition comprising a therapeutically effective amount for treating a benign hyperproliferative skin disorder associated with excessive proliferation of skin cells, as recited in present claim 1. Rather, Beltner expressly teaches only treatment of trauma to the skin. Applicants submit that none of the skin traumas

disclosed in Beltner are hyperproliferative skin disorders associated with excessive proliferation of skin cells as presently claimed.

Additionally, claim 1 recites a "therapeutically effective amount of at least one cyclic psychotropic agent for treating a benign hyperproliferative skin disorder." Applicants submit that Beltner does not teach or suggest "a therapeutically effective amount" for treating a benign hyperproliferative skin disorder. The present Examples, at pages 29-31 of the present specification, illustrate topical compositions containing 0.01wt%, 0.02wt%, 0.05wt% and 0.07wt%, active ingredient. Specifically, subject 1 was treated with 0.01% and thereafter 0.02% thioridazine cream; subject 2 was treated with 0.2% thioridazine cream; and subject 3 was treated with 0.05% and thereafter 0.07% thioridazine. According to the present specification, the compositions of the present invention comprise 0.01-5% of active ingredient by weight. More specifically, as taught by Example 2B of the present specification, subjects 1-4 were treated with preparations comprising 0.01, 0.02, and 0.05% of active ingredient.

In contrast, Beltner exemplifies topical cream preparations comprising far greater amounts of active ingredient than the present invention. Specifically, tables 5-9 and 36-39 of Beltner disclose treatments with topical cream preparations containing 7.4% of active ingredient by weight. Tables 10-13 of Beltner disclose a preparation containing 20% of active ingredient by weight. Further, tables 40-44 of Beltner disclose a preparation containing 16.7% of active ingredient by weight. Accordingly, the topical preparations of Beltner comprise far greater dosages of active ingredient than the presently claimed

therapeutically effective amount. In conclusion, Beltner does not teach or suggest a composition for treating a benign hyperproliferative skin disorder or a therapeutically effective amount of a composition for treating a hyperproliferative skin disorder, as presently claimed.

In view of the foregoing, it is submitted that Beltner does not teach, either expressly or inherently, each and every element claimed in claims 1-4, 7-15 and 63, as required for anticipation under 35 USC § 102 (b). Accordingly, the Examiner is respectfully requested to withdraw this rejection.

IV. At page 11 of the Official Action, claims 1-10, 14-15, and 61-69 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting.

The Applicants respectfully request that these rejections be held in abeyance until an indication of allowable subject matter is made in this application, at which time the Applicant will either address these rejections or file a terminal disclaimer.

CONCLUSION

In view of the foregoing, Applicants submit that the application is in condition for allowance. Early notice to that effect is earnestly solicited. The Examiner is invited to contact the undersigned attorney if it is believed that such contact will expedite the prosecution of the application.

In the event this paper is not timely filed, Applicants hereby petition for an appropriate extension of time. Please charge any fee deficiency or credit any overpayment to Deposit Account No. 14-0112.

Respectfully submitted,

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